

REMARKS

In response to the Restriction Requirement mailed January 22, 2002, Applicants elect group I, encompassing claims 1-21. Claims 22-50 have been canceled as drawn to non-elected subject matter. In this response, claims 51-57 have been added. After entry of this amendment, claims 1-21 and 51-57 will be pending. Appendix I is attached listing the pending claims.

Each of the added claims has support in the specification as filed, and none of the new claims adds new matter to the specification. The claims are supported generally in the specification as well as specifically, among other places, as follows: support for claims 51-54 can be found on page 10; support for claims 55 and 56 can be found on page 19; and support for claim 52 can be found for claim 57 on pages 30, 38, 40, 42, 63, 64, 66 and 69.

Respectfully submitted,

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APPENDIX I

List of Pending Claims in the Application

1. A method of reducing binding of a microorganism to a surface, comprising enzymatically modifying an adhesin on the microorganism.
2. The method of claim 1, wherein enzymatically modifying comprises contacting the microorganism with a polyphenol oxidase, an asparaginase, or a combination thereof.
3. The method of claim 1, wherein the microorganism comprises a prokaryote, a eukaryote, a virus, or a combination thereof.
4. The method of claim 3, wherein the prokaryote comprises a gram-positive bacterium, a gram-negative bacterium, or a combination thereof.
5. The method of claim 3, wherein the prokaryote comprises a *Staphylococcus*.
6. The method of claim 3, wherein the eukaryote comprises a fungus or protozoan.
7. The method of claim 6, wherein the fungus comprises a *Candida*.
8. The method of claim 1, wherein the adhesin comprises a lectin.
9. A method of reducing adhesion by a microorganism, comprising exposing the microorganism to an effective amount of an enzyme which reduces adhesion by a microorganism.

10. The method of claim 9, wherein the enzyme catalyzes a reaction for modifying a molecule on the microorganism.
11. The method of claim 9, wherein the enzyme catalyzes modification of a side chain of an amino acid.
12. The method of claim 11, wherein the amino acid is found in the binding site an adhesin.
13. The method of claim 11, wherein the amino acid comprises asparagine, tyrosine, or a combination thereof.
14. The method of claim 9, wherein the enzyme modifies a carbohydrate binding site on the microorganism.
15. The method of claim 12, wherein a lectin comprises the carbohydrate binding site.
16. The method of claim 9, wherein the enzyme comprises a polyphenol oxidase, an asparaginase, or a combination thereof.
17. The method of claim 9, wherein the microorganism comprises a prokaryote, a eukaryote, a virus, or a combination thereof.
18. The method of claim 17, wherein the prokaryote comprises a gram-positive bacterium, a gram-negative bacterium, or a combination thereof.
19. The method of claim 18, wherein the prokaryote comprises a *Staphylococcus*.

20. The method of claim 17, wherein the eukaryote comprises a fungus or protozoan.

21. The method of claim 20, wherein the fungus comprises a *Candida*.

51. (NEW) The method according to claim 1, wherein the surface comprises cells, tissues or extracellular matrix.

52. (NEW) The method according to claim 1, wherein the surface comprises a catheter, implant, prosthesis or man-made device that is placed in the catheter, implant, prosthesis or man-made device being located in or on a mammal's body or body cavity.

53. (NEW) The method according to claim 1, wherein the surface contacts mammals or mammalian fluids.

54. (NEW) The method according to claim 53, wherein the mammal is human or mammalian fluid is from a human.

55. (NEW) The method according to claim 1, wherein enzymatically modifying an adhesion further comprises decreasing adhesion.

56. (NEW) The method according to claim 9 or claim 55, wherein said decreasing fights biofouling, reduces dental caries, treats symptoms of infection in a patient in need thereof, treats infection in a patient in need thereof, treats ulcers in a patient in need thereof, serves as birth control in a patient in need thereof, reduces contamination of eggs and/or other poultry products, treats infection of peridontal tissue, eye, ear or throat in a patient in need thereof, kills mosquito larvae or fights skin infections.

57. (NEW) The method according to claim 1 or claim 9, wherein the microorganism is at least one selected from the group consisting of *S. sobrinus*, *S. sanguis*, *A. naeslundii*, *E. coli*, *Porphyromonas gingivalis* W50, *Actinobacillus actinomycetemcomitans* 33384, *F. nucleatum* 25586, *Capnocytophaga ochracea* 27872, *P. intermedia* 25611, *S. cerevisia*, *Saccharomyces*, *P. aeruginosa*, *Streptococcus pneumoniae*, *Haemophilus influenzae* and *S. enteritidis*.